ABSTRACT OF THE DISCLOSURE

A perpendicular magnetic recording medium and a magnetic storage apparatus, which show an excellent S/N ratio and are suitable for ultra high density magnetic recording, are provided. In the perpendicular magnetic recording medium having a recording layer composed of at least two layers of a main recording layer formed above a substrate and a thermally-stabilizing layer formed on the main recording layer, the thermally-stabilizing layer being formed closer to a surface of the medium than the main recording layer, alloy containing Co and Cr as a main component, which shows a low noise property, is used as the main recording layer, amorphous alloy containing rare earth metals and 3d transition metals as a main component, which is excellent in thermal stability, is used as the thermally-stabilizing layer, and a cap layer formed of alloy containing Co and Cr as a main component is formed on a surface of the thermally-stabilizing layer.